1/12/88 B6200-2

World Financial Markets

Morgan Guaranty Trust Company of New York

November/December 1987

The world economy post October 19, 1

Growth and inflation prospects for 1988, 4

Financing the U.S. current account, 7

Financing the future, 10

Assessment, 13

Statistical appendix, 15

The world economy post October 19

Mid-December found equity price indices down from the end of September, when world equity markets were near their peak, by 13% in Japan, 18% in Canada, 27% in the United States, 30% to 35% in the largest European markets, and 45% to 50% in some Far Eastern ones (see Table 1). Declines of these magnitudes deter consumption and investment as individuals and corporations become more cautious, save more, cut expenditures, and delay investment. As a result, most analysts have lowered their 1988 GNP growth projections, especially for the United States, where direct stock ownership by individuals is relatively widespread and savings rates are at rock bottom. If, as conventional wisdom holds, a one-dollar decline in U.S. wealth depresses consumption by five cents within six quarters, this autumn's decline of equity prices could cut U.S. growth next year by a full percentage point. (In the United Kingdom, the other country where forecasters seem to agree that the direct wealth effect could be significant, the reduction would be about 0.3%.)

However, the linkage between stock prices and economic performance is less certain than any simple rule may suggest. To focus exclusively on the autumn decline overlooks the fact that since last December, Japanese equities have risen 16%, U.S. and U.K. stock indices are roughly unchanged, and the largest declines — of 30% to 40% — have been seen in Continental Europe. Yet, while overall world equity market valuation has contracted by about $1.4 trillion since September, it still stands about $0.6 trillion ahead of last year's level, thanks mainly to gains in Japan. Thus it is not clear that all consumers feel poorer. Of course, any new round of major declines almost certainly would cut enough into earlier market profits as to reduce consumers' sense of well-being.

Measuring stock market valuation declines relative to GNP provides useful insight into their economic impact (see Table 2). While the U.S., Japanese, and Canadian valuations are each down by around 15% of GNP, European valuations have been much harder hit since September; among the major countries, the United Kingdom — where foreign ownership of stocks appears to be higher than in Continental Europe — shows the greatest loss in GNP terms measured from the market high. And, despite a relatively small equity market size, the

Table 1

Stock market swings

	Percent change in index* December 14, 1987 from:	
	End-Sep 1987	End-Dec 1986
United States	—27	—4
Japan	—13	16
Germany	—35	—39
France	—30	—29
Italy	—24	—32
United Kingdom	—31	0
Canada	—18	6
Switzerland	—35	—31
Australia	—45	—12
Hong Kong	—50	—21

*Morgan Stanley Capital International.

Table 2

Stock market indicators

	Capitalization* Sep 30, 1987		Change in capitalization as % of GNP** Dec 14, 1987 from:	
	$ billions	% of GNP	End-Sep 1987	End-Dec 1986
United States	2871	64	—17	—2
Japan	2896	119	—16	15
Germany	255	23	—8	—10
France	185	22	—7	—7
Italy	128	17	—4	—6
United Kingdom	728	118	—36	0
Canada	244	62	—12	3
Switzerland	165	96	—34	—28
Australia	132	68	—31	—5
Hong Kong	84	187	—93	—25

*Morgan Stanley Capital International. Capitalization figures refer to the market value of equities of domestic firms, excluding unit trusts (to avoid double counting).

**These estimates apply the percentage change in the previous table to the September 30 capitalization figures, and express the result as a percentage of nominal GNP in 1987.

decline in Germany's equity capitalization since the end of 1986 has been the steepest relative to GNP among all G-7 countries.

The economic impact of the stock market crash hinges on the policy stance before and after the decline; indeed, U.S. postwar experience puts in question whether a market decline has an independent impact. Thus the bear market of the early 1960s had little effect on consumption, thanks largely to easy fiscal policy and to low interest rates (amid minimal inflation expectations, the Fed funds rate was below 3% from mid-1960 through late 1963). A decade later, the 1973-75 recession followed an oil and non-oil commodity price shock that inspired sharply higher interest rates (the Fed funds rate rose from below 4% in early 1972 to 12% in 1974). The drop in equity prices, which began in early 1973, as much reflected as caused the subsequent economic downturn. Inflation fighting also dominated in 1980-82, when the associated stiff interest rates contributed powerfully to both the fall of equity prices and another deep recession. In 1987 the ill-conceived attempt to peg exchange rates compounded upward pressure on interest rates even as the stock market — particularly in the United States — developed what seems to have been a speculative bubble, driven by new technologies and a wave of takeovers. Dividend and earnings yields on stocks were driven way below the rising yields available in the bond market, culminating inexorably in the stock market crash.

As for policies after the October 1987 crash, the response worldwide has been muted. The monetary response was prompt. With worries about financial disruption and recession dominant, U.S. monetary authorities assured ample liquidity immediately following the crash. Other central banks did likewise. For example, the Bank of Canada and the Bank of England both stepped forward with alacrity and high visibility. Others — notably, the Bank of Japan and the Bundesbank — were more restrained, judging liquidity already ample. Indeed, in the first two weeks after October 19, the Bundesbank barely altered its approach to the money market, and short-term interest rates fell less than elsewhere. At no time did central banks "flood the market" with liquidity; rather, they made clear that they would meet any reasonable liquidity need.

Interest rates fell worldwide, helped by investors shifting into government bonds and other liquid investments. Many saw capital gains in the bond market offsetting part of their equity losses, even though both bond yields and short-term interest rates remain above the lows of the last eighteen months (see Charts 1 and 2). Larger rate declines in the United States than in Germany and Japan helped carry the dollar lower and with no apparent resistance on the part of the U.S. authorities. Whereas the U.S. stock market managed some recovery, the dollar's fall helped prolong stock market declines into early November in Europe and Japan. By then, intense upward pressures on the mark tilted the Bundesbank to an easier course. The German repurchase rate has since been cut twice and the discount rate once. The latter step, at the beginning of December, was joined by official rate cuts in six other European countries, reflecting rising apprehension over Europe's economic outlook.

Since mid-November, the Federal Reserve has withdrawn much of the added liquidity. Interest rates have crept back up. The U.S. money supply already was growing slowly. M2 rose just 4.2% in the last year, less

Chart 1

10-year government bond yields

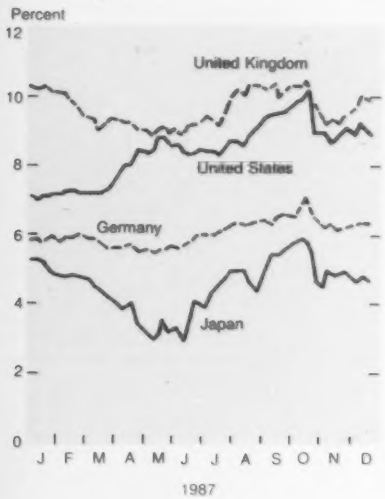
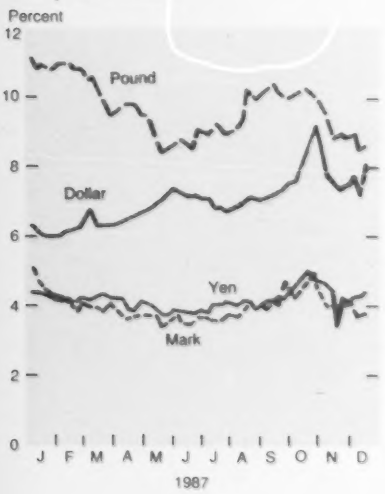


Chart 2

3-month Eurocurrency deposit rates



than half its growth during 1986 and pointing to a more subdued economy in the next few quarters even before the stock market declined. The Bank of Japan and the Bank of Canada also have returned to a less accommodative stance, reemphasizing their commitments to price stability.

Except in the United States, money growth has picked up this year in most major countries as measured, for example, by the broader aggregates for Japan and the United Kingdom and by Germany's closely watched CBM (Central Bank Money). The pickup has stemmed importantly from the demand for appreciating currencies. Demand recently has been boosted further by the increased general uncertainty following the October stock market crash. Notwithstanding money growth in excess of preset targets, formal or otherwise, failure to accommodate the additional money demand from either source in current circumstances would jeopardize economic activity.

Fiscal policies have changed even less following the crash. In the United States, minimal substantive achievement has come of the initial sense of urgency and the volumes of publicity that surrounded negotiation of a budget package to supersede the cuts otherwise mandated by Gramm-Rudman. The advertised $76 billion deficit reduction in 1988 and 1989 does not mean that the budget deficit will be $76 billion lower in 1989 than earlier projections showed; rather, it is the sum of around $30 billion in cuts in 1988 and little more than their continuation in 1989. The negotiators avoided any hard decisions about meaningful tax increases, let alone difficult expenditure reductions.

Nor have strong domestic and international pressures for fiscal stimulus produced a meaningful package in Germany. The three-year, DM 21 billion lending program aimed at municipalities and small and medium businesses is likely to lead borrowers to substitute somewhat cheaper government credit for that from the private sector. The only stimulus involved — an interest subsidy — amounts to a negligible DM 200 million per year. No other fiscal policy measures in the major countries have been announced since October. Indeed, spurred by rapid economic growth in the second half of the year, talk of reducing the budget deficit in Japan has resumed.

The absence of significant policy measures following the crash reflects simultaneous concern about recession and inflation. Although these inflation fears are sincere, they have slim justification. As explained below, despite some pickup in 1987, inflation has not developed the momentum to validate the more pessimistic forecasts in the near-term and is quite unlikely to do so during 1988 in an environment of slower economic growth.

In sum, an unclear policy response has been added to the uncertain effects of the stock market crash. Thanks to the fall of the dollar, the weakened prospect for the domestic demand component of the U.S. economy is partly mitigated by the reasonable hope of continued strength from net exports. But these gains will come at the expense of growth in Europe and Japan, whose exports also will be adversely affected by any retrenchment on the part of U.S. consumers. The relatively large fall in European equity prices over the longer term may be indicating a slower growth outlook there than in other industrial economies. Thus the supposed silver lining of the crash, that it would produce a sharp improvement in the U.S. trade deficit by reducing U.S. consumption and boosting exports, may be more imagined than real.

Table 3

Global economic environment

percent change unless otherwise noted

	Projections made in December for		Projections made in September for	
	1987	1988	1987	1988
OECD real GNP	2.9	2.5	2.6	2.8
United States	2.8	2.4	2.6	2.9
Japan	4.0	3.6	3.2	3.2
Europe	2.3	1.9	2.0	2.2
Germany	1.5	1.6	1.5	2.2
OECD CPI (Dec/Dec)	3.2	3.3	3.3	3.7
United States	4.4	4.8	4.6	5.0
Japan	1.0	1.1	1.1	1.1
Europe	2.9	2.7	3.0	3.5
Germany	1.0	1.0	1.0	1.5
LIBOR, 6-month avg.	7.5	7.8	7.5	8.4
Spot exchange rates (year-end)				
Yen/dollar	125	115	135	115
DM/dollar	1.60	1.50	1.75	1.50

Table 4

Composition of GNP growth

percent per annum

	1987	1988
Domestic demand contribution		
United States	2.4	1.5
Japan	4.5	4.7
Germany	2.2	1.8
Net foreign contribution		
United States	0.4	0.9
Japan	—0.5	—1.1
Germany	—0.5	—0.2
Real GNP		
United States	2.8	2.4
Japan	4.0	3.6
Germany	1.5	1.6

Growth and inflation prospects for 1988

Ambivalent policy responses to the global stock market declines of late 1987 argue that 1988 real GNP growth in the industrial countries on a fourth-quarter/fourth-quarter reckoning may do well to reach 2% — much below the 3.5% pace of 1987. On a calendar year comparison, growth in 1988 may average no more than 2.5%, down from 2.9% for 1987 (see Table 3) and the poorest performance since 1982.

The risks are that the 1988 slowdown will prove more severe. The size of the wealth effects and, more especially, the confidence effects emanating from a global stock market decline of October's magnitude are highly uncertain. Still, they are unlikely to be much smaller than those incorporated here. The world economy could be in for a long, slow loss of momentum. The global scope of the financial downturn suggests that individual economies may be hit first by domestic wealth and confidence effects and then, some time later, by reduced demand from abroad. The likelihood that the United States will be driven to rein in domestic demand for a prolonged period, in the interest of external adjustment, puts in question the timing and strength of any global growth pickup in the medium term.

More immediately, U.S. growth may match the industrial-country average almost exactly in both 1987 and 1988. Spurred by strength in real net exports and business fixed investment, real GNP growth strengthened during 1987 to an unsustainable 4.3% in the third quarter alone. Although both housing and consumption were beginning to exhibit behavior typical of recession, overall domestic demand was too strong to accommodate higher export production and simultaneously reduce the trade balance. Nonetheless, the continued influence of past dollar declines promised to keep exports strong and rising capacity utilization pointed to fast growth in business investment.

Clearly, some new development was needed to push domestic demand growth in the United States below that abroad in order to reduce the U.S. trade deficit. The stock market decline is expected to help cut domestic demand growth to 1.5% next year from 2.4% in 1987 and over 4% in the third quarter alone. Import demand should slow commensurately. Besides, since mid-October the dollar has fallen a nominal 10% against the yen, 9% against the mark, and a real 4.4% on a broad effective basis against the currencies of all principal U.S. trade partners, with further decline likely in store. The competitive boost for U.S. producers should bolster their home market share and counter any slowing of export demand resulting from reduced growth prospects abroad. Indeed, net export gains should prevent a sharp downturn in overall U.S. economic activity by contributing around 1% to GNP growth in 1988, about double their 1987 contribution (see Table 4).

Japan's domestic demand accelerated during the first three quarters of 1987. In the third quarter alone, real GNP grew at a seasonally adjusted annual rate of 8.4%, with net exports contributing almost a full percentage point and housing investment surging at a near-50% annual rate. Business fixed investment rose 9.3%, furthering the continuing adjustment of Japanese producers to a higher yen and anticipating continued strength in domestic demand. The recent strength of housing is likely to sustain consumption and economic activity

Table 5

Real GNP

percent change from previous year

	1987	*1988*
United States	2.8	2.4
Japan	4.0	3.6
Germany	1.5	1.6
France	2.0	1.8
Italy	2.8	2.2
United Kingdom	4.0	2.3
Canada	3.7	2.6
Spain	3.8	3.0
Australia	4.2	2.5
Korea	12.5	10.0
Taiwan	10.5	7.5
OECD	2.9	2.5

more broadly well into 1988. Besides, the renewed decline of the dollar may not undermine export performance greatly, since many of Japan's producers apparently have already geared up for a yen-dollar rate of Y120. The mood in Tokyo is correspondingly upbeat, even though the yen's strength is likely to brake Japan's real GNP growth somewhat from 4% in 1987 to around 3.6% next year.

Elsewhere in the Far East, *Korea* and *Taiwan* are likely to continue strong expansion in 1988, on the order of 10% and 7.5%, respectively, for real GNP (see Table 5), provided no recession develops in the United States. Korea's summer wage settlements are likely to add momentum to consumption. In Taiwan, much-delayed government infrastructure spending and some consumption gains are augmenting exports as a source of strength. In both countries, growth dependence on exports has declined less than in Japan, instead being sustained by exchange rate policy. The Korean won has appreciated less than 10% against the dollar over the past two years and, in the face of an unexpectedly high current account surplus, actually depreciated slightly in 1987 in real effective terms. Taiwan's currency, despite appreciating 29% against the dollar since late 1985, is up much less than the yen and most European currencies since the dollar first began to turn. In 1987 alone, while running a current account surplus approaching 31% of GNP, the real effective exchange rate of the Taiwan dollar has risen less than 5%.

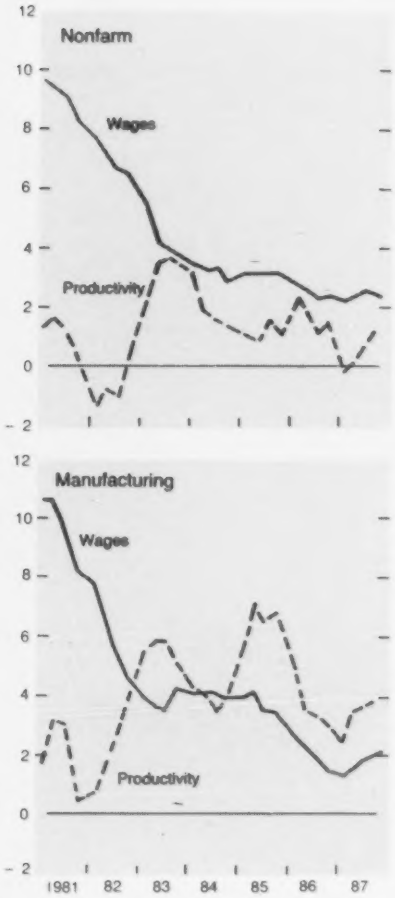
With little of the Far East's confidence and resilience, *Europe's* outlook is distinctly troubled. True, several of the larger countries have achieved at least moderate, or even above-potential, growth in 1987, with inflation stable or falling. For example, in the three quarters leading up to October 19, France, Italy, Spain, and the United Kingdom each grew at annual rates of 3%-4%. Reflecting wage growth, terms of trade gains, and — in the fast-growing countries — confidence, consumption fueled much of the recent rise in domestic demand. Business investment played an important supporting role in most countries, and a leading role in France, Germany, and Spain. In Germany, the United Kingdom, and elsewhere, equity began to play an important role in financing business investment for the first time in decades. Even so, Germany managed real GNP growth of just 2.4% in the first three quarters, aggravating the trade deficits of its faster-growing trade partners and thereby occasioning concern in many.

Because European producers, in contrast to the Japanese, feel less able to withstand dollar depreciation or a U.S. economic slowdown, the pessimism in Europe following the global stock market crash has been greater than in the United States or Japan. This threatens consumer and business confidence. Besides, the higher cost of capital implicit in lower stock prices may prove a drag on investment. For Europe as a whole, domestic demand seems unlikely to strengthen in the year ahead. Real GNP growth could dip from 2.3% in 1987 to 1.9% in 1988, down from the 2.2% expected before October 19. With its investment prospects faltering, projections for 1988 economic growth have been marked down more for Germany, from 2.2% to 1.6%, than for other European countries. As a result, the trade imbalances within Europe are not expected to diminish anytime soon. Pressure on Germany for stimulus has produced meager results so far. The pressure now may be in temporary abeyance but is likely to resume in due course for an EMS

Chart 3

U.S. wages and productivity

percent change from preceding year



realignment, more policy adjustment within Europe, or both.

A number of other industrial countries are still more troubled. Several, such as Australia, New Zealand, and Norway, have launched on domestic demand restraint to redress inflation or balance of payments problems, but are ill-equipped to cope with much slowing of the world economy. In *Australia*, for example, inflation, if decelerating, has again run above the OECD average this year and the already substantial external debt continued to rise. For much of 1987 domestic demand growth was surprisingly strong as consumers responded to employment gains and reduced income taxes and interest rates. Finally, fiscal policy moved toward restraint, with state governments beginning to join the federal government in retrenching. And in the October crash, Australia's stock market was among those hardest hit. The decline there has had wider financial implications, as domestic lenders scrutinize borrowers more carefully and foreign investors become more cautious. Australia also is highly vulnerable to any commodity price softening in the event of a greater slowdown in the world economy.

At best, non-oil commodity prices are likely to remain flat in real terms next year, not only because of GNP growth of 2.5% in the industrial countries, but also because the temporary supply disruptions, low inventories, and crop failures that drove prices up this year are not expected to recur. As for petroleum, prices are prone to be volatile. The combination of ample inventories, subdued worldwide demand growth, and current overproduction leaves little room for any oil price increase and could inspire considerable weakness for a time.

General price inflation in the industrial countries, as measured by consumer prices, should average about the same in 1988 as the 3.2% now likely for 1987. That should be true at least of Japan and Europe, whose inflation concerns this year were a direct consequence of the Louvre accord. In the accord's early phase, unsterilized intervention led to rapid money growth and, as time went by, currency stability deprived Japan and Europe of the anti-inflationary benefits of appreciation and exposed them to increases in the dollar prices of commodities. Inflation fears escalated even in the face of good actual inflation performance. Last winter German forecasts of inflation ran as high as 2% or more for the year; in fact, consumer prices have risen only 1% in the last 12 months. Japanese anxiety has focused on the strengthening of domestic demand throughout 1987, taking little comfort from the miniscule rise in overall consumer prices. The dollar decline and the softening of oil prices that followed the stock market crash have eased inflation worries somewhat in both Japan and Europe. But the worries will again find sustenance if money growth remains high.

Immediately following the stock market crash, it seemed that the sharp slowing of the economy initially feared would hold U.S. inflation at bay. However, concern soon returned as the strength of the pre-crash economy became better appreciated. Besides, signs were few that U.S. consumers subsequently were cutting back. November's commodity price increases, plus the renewed fall of the dollar, compounded inflation fears. The more basic question lies with the future of unit labor costs, now that unemployment has fallen below 6%. Were real GNP growth to accelerate much above its likely 2.7% potential rate, wage behavior could worsen. But, in view of the outlook for slower GNP growth, wage gains

next year may edge no higher than 4%-4.5%, despite further dollar decline. Were growth to dip below 2%, little or no wage acceleration might result. U.S. wage behavior appears to have changed for the better, not only as a result of favorable demographics but also in response to enhanced global competition. Thus wage growth has been remarkably quiescent in both 1986 and 1987 (see Chart 3), undershooting consensus predictions by some 2%. At the same time labor productivity growth has recently strengthened, improving the chances for unit cost restraint.

As for global trade and current account imbalances, attention centers on the U.S. trade deficit. There is a reasonable chance that the key U.S. trade deficit will at long last shrink, falling perhaps $30 billion in 1988 from the record $170 billion now in store for 1987; the drop could be greater were international oil prices to slide substantially below $18 per barrel. The basic projection for U.S. trade balance improvement rests on the dollar's long-standing decline plus the expectation that U.S. real GNP growth in 1988 will run no higher than in other industrial countries on average. It is worth recalling, however, that a somewhat similar assessment of the dollar and the growth differential was last winter's consensus view for 1987; the consensus proved wrong for 1987 and could do so again, notwithstanding the common view that the stock market crash will do more to rein back demand in the United States than abroad. If the consensus proves right this time, the $30 billion narrowing of the U.S. trade deficit in 1988 will be accompanied by a roughly $20 billion narrowing of the current account deficit, the difference being mainly attributable to the interest costs on this year's addition to the U.S. net external debt. At around $145 billion in 1988, or 3% of U.S. GNP, the current account deficit casts a lengthening shadow over global financial markets.

Financing the U.S. current account

The difficulty in reducing the U.S. trade balance, episodes of heavy foreign exchange intervention, increasing calls for U.S. Treasury debt issuance in foreign currencies, and the latest decline of the dollar all point to the issue of financing the U.S. current account deficit. Until now this has largely been taken for granted. With the prospect of current account deficits of $100 billion or more seemingly assured for years to come, how can the United States continue to finance them?

Complacency for long has been encouraged by the ready availability of external financing to the United States during the first half of the 1980s. The ease of financing primarily reflected changing U.S. attitudes to investment abroad, interest and exchange rate developments and expectations, and the thirst for diversified U.S. assets on the part of the major surplus countries of the Far East, some of which are net creditors for the first time and have begun building their portfolios by accumulating dollars. Until 1986, these forces enabled the current account to be financed entirely by private capital flows in what may be stylized as three "waves" of private financing.

Table 6

U.S. balance of payments

billions of dollars, annual rate; minus sign indicates an outflow

	1982	1983	1984	1985	1986	1987 1st half	1987 Q3
Current account	—8.7	—46.3	—107.0	—116.4	—141.4	—155.9	—173.5
Net private capital	16.2	46.7	112.6	124.2	108.3	97.1	171.0
*Net direct investment**	2.2	5.4	17.3	5.9	1.4	6.7	11.7
*Net securities investment**	19.0	16.3	36.0	59.8	71.4	56.5	30.5
Net bank	—45.4	20.4	22.7	39.7	18.3	22.4	110.5
Other private capital net	4.2	—6.6	9.7	0.9	—6.7	9.5	0.0
Errors and omissions	36.1	11.2	26.8	17.9	23.9	2.0	18.3**
Net official capital	—7.5	—0.4	—5.6	—7.8	33.1	58.8	2.5
U.S. assets	—11.1	—6.2	—8.6	—6.7	—1.6	10.8	1.1
U.S. liabilities	3.6	5.8	3.0	—1.1	34.7	48.0	1.4

*Net direct investment includes reinvested earnings of foreign subsidiaries; to adjust for securities market borrowing by offshore subsidiaries of U.S. corporations, intercompany debt between U.S. parents and their Netherlands Antilles affiliates is shifted from direct investment to securities investment.

**Errors and omissions includes other net private capital.

In the first, net capital inflows through U.S. banks dominated (see Table 6). On the asset side, the banks' disengagement from international lending began to show through in the 1983 balance of payments statistics, including not only the banks' pullback from lending to developing countries but also their reduced activity vis-à-vis other industrial countries. On the liability side, expectations of higher interest rates, beginning early that year and confirmed by rising short-term rates in the summer, attracted foreign inflows into U.S. banks. This phase continued until mid-1984, when the Federal Reserve reversed its policy of tightening and both short-term and long-term interest rates began to fall.

In 1984 the second wave saw securities, particularly Treasury and Eurobonds, take over as the principal conduit for U.S. current account financing, thanks importantly to yield differentials at least initially strongly favoring the dollar. Japanese institutional investors focused on Treasuries. Investors elsewhere became particularly active securities buyers in the second half of the year, following the removal of the withholding tax on corporate Eurobonds. Eurobonds became much more important in U.S. business finance and in overall international financial flows. Unlike companies in most other countries, U.S. firms had large borrowing requirements. Often well-known and high rated, U.S. corporations made up a large proportion of Euromarket borrowers. Securities inflows, especially via Euromarket borrowing, continued strong through the first half of 1987.

Yet from early 1986 a third wave of financing got under way. Foreigners, especially the Japanese, increasingly diversified their purchases away from Treasuries and Eurobonds.* In the first half of 1987 foreigners' holdings of Treasuries declined, their net purchases of equities surpassed those of bonds, and they stepped up real estate purchases and direct investment (see Tables 7 and 8). Direct investment inflows as measured in the balance of payments grew to an annual rate of over $30 billion in the first half of 1987, or 65% of the net amount of securities purchased in the same period. Total direct investment will have run much higher, since a large proportion is financed through borrowing, much of it in the United States. For their part, U.S. residents have raised their own direct investment abroad, with earnings reinvestment — in part reflecting exchange gains on foreign cur-

*According to U.S. data, net Japanese purchases of U.S. Treasury securities declined during 1986 and fell further during the first half of 1987. The statistics are at odds with market perceptions and with Japanese balance of payments and securities dealers' statistics. The discrepancy arises in part because increasingly the nationality of an investor or financial intermediary is not synonymous with its country of residence. If the U.S. affiliate of a Japanese securities house or institutional investor purchases U.S. Treasury securities, the market may perceive it as Japanese investment, but no balance of payments flow has occurred because the affiliate is resident in the United States. Only if the affiliate borrows funds from its Japanese parent is there a balance of payments transaction, which is reported as direct investment. Similarly, errors in distinguishing residence from nationality can contribute to discrepancies between U.S. and Japanese statistics attempting to measure the same flows.

Table 7

Selected U.S. private capital flows

billions of dollars, annual rate; minus sign indicates an outflow

	1984	1985	1986	Q1-Q3 1987
Net foreign purchases of U.S. assets	66.3	86.1	99.8	85.3
Direct investment	25.4	19.0	25.1	34.9
Securities	40.9	67.1	74.7	50.4
U.S. Treasury securities	23.0	20.4	8.3	—8.8
*Other bonds**	19.2	42.4	49.4	28.2
Equities	—1.3	4.3	17.0	30.9
Net U.S. purchases of foreign assets	—12.9	—20.6	—27.0	—29.0
*Direct investment**	—8.1	—13.1	—23.7	—26.5
Securities	—4.8	—7.5	—3.3	—2.5
Bonds	—3.8	—3.8	—2.6	—0.8
Equities	—0.9	—3.7	—0.7	—1.7

*Adjusted for securities market borrowing by Netherlands Antilles affiliates.

Table 8

U.S. current account financing

percent of current account deficit

	1984	1985	1986	1987 Q1-Q3
Private	105	107	76	75
Net foreign purchases of U.S. assets	62	74	71	53
Of which				
U.S. Treasuries	22	18	6	—5
Other bonds	18	36	35	17
Equities	—1	4	12	19
Net U.S. purchases of foreign assets	—12	—18	—19	—18
Net bank and other private capital	30	35	8	36
Errors and omissions	25	15	17	5
Official	—5	—7	24	25

rency assets — a substantial component, yet have not on balance been major buyers of foreign securities during the deficit period.

The third wave of private net capital inflow has not provided full financing of the U.S. current account deficit. In 1986 official finance covered almost one-quarter of the deficit. The proportion rose above one-third in the first half of 1987, but fell abruptly in the third quarter. The $68 billion increase during the first half of 1987 in the foreign exchange reserves of a handful of major holders — among them, Taiwan, Germany, and Japan (see Table 9) — and central bank statements that the G-10 countries had undertaken foreign exchange intervention of some $70 billion from January to May suggested that official financing exceeded the U.S. current account deficit, implying that foreigners were liquidating their U.S. assets, a condition popularly labeled "flight from the dollar."

Admittedly, the enormous buildup of reserves in Japan, and also some portion of the increase in Europe's reserves, have largely reflected intervention to buoy the dollar. However, a rise in official reserves abroad need not betray pressure on the dollar or greater official financing of the U.S. current account. Not all reserve accumulation occurs through intervention; in particular, controls can centralize funds generated by a current account surplus at the monetary authority, as in Taiwan where the official sector has customarily made foreign investment decisions that other major countries leave to the private sector. Nor do reserve increases automatically finance the U.S. deficit. For example, when foreign central banks place reserves in the Euromarket, if the funds ultimately reach the United States, they do so through private bank flows or other capital account transactions, rather than official financing. Even the volume of intervention overstates the extent of central bank *dollar* support operations. Not all exchange market intervention directly supports the dollar: virtually all Germany's reserve growth at the start of 1987 took place in support of unviable intra-EMS currency relationships prior to their realignment; much of this year's U.K. intervention has served to hold down the pound against the mark; some countries later repurchase reserves they have used in intervention, producing some double-counting.

In sum, official flows have contributed a significant fraction of U.S. current account financing during 1987 but their role is too easily misrepresented. Official flows cannot be characterized as lending of last resort to the United States today in the way that they nearly were in 1978, when Germany, Japan, and Switzerland were the major official reserve holders. All three, and the United States itself, agreed at the time that the dollar's precipitous decline was unwarranted. In 1986, intervention in large part reflected genuine disagreement among the major governments about whether and how much the dollar should decline. In 1987, while much intervention has supported the Louvre accord, it is not clear that a moderately declining dollar would have precluded full private financing at a reasonable price.

By the end of 1987, the United States will have moved into a significant net debtor position estimated at $425 billion (see Table 10). The estimate can only be rough, thanks to the shortcomings of balance of payments accounting convention and reporting compliance. For example, the enormous overseas direct investments by the United States in the 1950s and 1960s are valued in the official statistics at essentially historic cost, a con-

Table 9

Official reserves

billions of dollars, excluding gold

	Changes in 1987			Levels
	1st half	Q3	Oct	End Oct
Japan	26.8	2.8	5.9*	72.7
France	0.8	—1.5	—1.5e	29.5e
Germany	10.6	1.3	4.7	66.7
Switzerland	—0.4	—0.6	1.0	20.5
United Kingdom	10.3	0.4	7.4*	36.6
Subtotal	48.1	2.4	17.5	226.0
Spain	5.2	5.6	n.a.	25.5**
Taiwan	14.6	5.7	2.0e	68.5e
Total	67.9	13.7	19.5	320.0
Memo items: Net official financing of U.S. current account	28.8	0.6	10.0e*	
Estimates of exchange market intervention by G-7	$70 billion to $90 billion through September			

*October and November.
**September.

Table 10

U.S. net international investment position

billions of dollars at year-end

	1981	1984	1986
Net international investment position	141.1	3.6	—263.6
U.S.assets abroad	719.8	896.1	1067.9
U.S. official reserve assets	30.1	34.9	48.5
Other U.S. government assets	68.7	84.9	89.4
Private assets	621.1	776.3	929.9
Direct investment	228.3	211.5	259.9
Securities	63.4	89.1	131.1
Other	329.4	475.7	539.0
Foreign assets in the United States	578.7	892.5	1331.5
Foreign official reserve assets	180.4	199.2	240.8
Other foreign assets	398.2	693.3	1090.7
Direct investment	108.7	164.6	209.3
Securities	93.6	185.5	405.5
Other	196.0	343.2	475.8

vention that captures neither current market value nor the bulk of any foreign exchange appreciation of the assets. Thus gross U.S. foreign assets are seriously understated in the official data. At the same time, the over-$200 billion cumulative inflow into the United States classified as unidentified "errors and omissions" in the last ten years in large measure reflected additional U.S. borrowing. U.S. foreign liabilities are correspondingly understated. Nevertheless, whatever the exact net debt figure, the rapidity with which the United States has fallen from the world's largest net creditor to its largest net debtor raises the question of just how high U.S. indebtedness can go.

Financing the future

Financing the U.S. current account deficits of the future, no matter how smooth hitherto, raises nagging questions about the form, availability, and assurance of voluntary funds, whether private or official. These questions underlie market obsessions to divine the preferences of foreign investors, especially those of the Japanese, and the willingness of governments to provide official financing.

In the immediate period ahead, if confidence and exchange rate expectations allow, private capital inflows conceivably may cover the U.S. deficit financing need once more without heavy official support. Still, doubts arise because global bond markets are moving on from the favorable phase of two cycles — disinflation and declining interest rates. Now too, the global equities markets have been deeply shaken. If neither dollar securities nor equities purchases are promising sources of private financing, official financing via exchange market intervention or U.S. foreign-currency-denominated borrowing may be called in aid. The wisdom of either must be queried, other than for tactical purposes, since experience shows that official financing often has been marshaled in defiance of reality, ultimately compounding adjustment costs.

It is important to comprehend the financial magnitudes potentially entailed in long-term financing of the U.S. external deficit. Suppose that priority is given to stabilizing the dollar and avoiding U.S. recession, while other industrial countries fail to raise their targets for economic growth. Although the U.S. trade deficit then should shrink next year and into 1989, Scenario 1 in Table 11 indicates that it subsequently would widen again to exceed $200 billion annually by the mid-1990s. Reduction of the current account deficit would be yet shorter-lived, with the imbalance surpassing $400 billion by 1995 — nearly 6% of GNP, versus under 4% today. Three-fifths of the 1995 deficit would represent interest payments on net U.S. obligations to foreigners, which by then could approach $2.5 *trillion* compared with the $425 billion likely on the official measure for the end of this year.

This will not happen. The very thought of a $2.5 trillion U.S. net foreign debt taxes the imagination. That sum would approximate today's total U.S. federal government debt, be more than double the gross foreign debt of all LDCs, and be six times Latin America's. Of course, some will say that these numbers need more proper perspective. Thus, $2.5 trillion would be about one-third of U.S. GNP in 1995, the equivalent of $1.8 trillion if scaled to the size of today's U.S. economy. Given that, for example, U.S. mortgage credit alone amounted to $2.5 trillion at the end of 1986, while estimated total U.S. private financial

Table 11

U.S. external financing vulnerability

	U.S. net foreign debt, end-1995		*Nominal effective dollar, % change through 1995*	*Average annual real GNP growth 1988-95, %*		*U.S. inflation* 1988-95 average, %*	*6-month LIBOR, average, %*	*CIF trade balance, 1995 $ bil.*	*Net interest payments, 1995 $ bil.*	*Current account, 1995 $ bil.*
	$ bil.	*% of GNP*		*United States*	*Japan & Europe*					
Fixed dollar scenarios										
1. No financing constraint	2510	35	0	2.4	2.7	4.0	9.7	—220	290	—435
2. Financing constraint, requiring no debt accumulation beyond 1995	1020	21	0	0.7	2.7	1.2	8.5	15	80	0
Lower dollar scenarios										
3. Limited financing constraint, stabilizing debt-GNP ratio	1215	16	—22** Y90 DM1.20	2.4 (1.9)***	3.2 (3.5)***	4.5	8.5	—45	105	—75
4. Accelerated cooperative adjustment to zero current account deficit by 1995, with dollar decline front-loaded and faster U.S. and foreign growth	900	13	—17** Y95 DM1.28	2.0 (1.5)***	3.3 (3.6)***	4.0	8.0	—10	65	0

*Manufactures wholesale prices.
**Percent change from the average for the week ending December 11, 1987. Although the nominal dollar declines more in Scenario 3 than in the fourth case, in real terms the exchange rate declines by the same amount (about 14%).
***Domestic demand growth.

and nonfinancial wealth then stood at $15 trillion, some might view a $1.8 trillion net foreign debt with near equanimity. Others would acknowledge the gravity of debt burdens but are more worried by LDC, real estate, energy, or financial restructuring exposures than by the portion of U.S. debt owed to foreigners.

Nonetheless, both market and political considerations make it altogether implausible that the United States will actually accumulate a multi-trillion dollar net foreign debt. The implausibility arises on three main grounds. First, the debt pileup would inevitably be viewed in financial circles as compelling evidence of mismanagement. International experience — drawn from Latin America during the past ten years, Britain and Italy in the mid-1970s, France at the end of the 1960s, to name just the leading examples of the postwar period — teaches that the perception of mismanagement destroys investor confidence. Beyond some point, the United States would begin to suffer capital flight, with consequences for the dollar and interest rates culminating in deep recession. That would bring the current account deficit and debt accumulation to a swift and brutal end, and much else besides. Second, political leaders are sure to respond to their own, and the popular, concern that net debtor status renders U.S. policies, companies, and real estate "hostage" to foreign influence or control. Although the latter are facts of life in an integrated world, regardless of the size of the net liabilities position, escalating U.S. indebtedness offends traditional notions of U.S. independence and leadership. Third, the U.S. external debt predicament encourages smugness, even arrogance, among creditor nations who would be tempted to assert conditions for ever-increasing support, conditions not guaranteed to be constructive for the U.S. or world economy.

The gravity of the risks attending an unbounded rise in U.S. external debt needs to be factored into the design of a strategy for international adjustment. For the United States, the immediate goal has long been to arrest deterioration of the trade deficit and for it to be seen on a declining path. This goal makes sense from the standpoint of staying current protectionist impulses but does not, of itself, come to grips with the reality that at some unpredictable time the United States is likely to face a binding external financing constraint with a critical time dimension. If the constraint is imposed by market forces, the results could be highly destructive. Rather than so imperil the world economy, it would be preferable that governments of the major industrial countries develop agreed and specific goals for adjustment, with better understanding of the financing implications and those for exchange rates and demand management.

As a hypothetical exercise, but one embodying the general intent of the Louvre accord, suppose that the U.S. adjustment goal would eliminate the current account deficit by 1995; that U.S. trade partners rise to the challenge of relaxing their domestic policies enough to compensate for net export loss; but that the price of their consent is the fixing of the dollar indefinitely at its current level. Scenario 2 in Table 11 shows the U.S. current account goal to be achievable, with net debt peaking out just above $1 trillion, provided the merchandise trade account strengthens by some $200 billion. But although the fixed dollar would hold U.S. inflation to German-Japanese levels, the economic cost would be wholly unacceptable. Continued U.S. growth might just about be possible through the 1988 election but real GNP would have to stagnate over the adjustment period as a whole and be accompanied by enormously high unemployment. Domestic demand would decline 0.5%-1% annually and, with population growth of 2% or so, U.S. living standards would be sorely hit. At the same time, industrial-country real GNP growth would average a mere 1.5% annually, an environment of despair for LDCs.

The failings of Scenario 2 are several. First, like the original Louvre accord, it arbitrarily rules out further dollar depreciation in favor of income compression as the instrument of U.S. adjustment. Second, it assumes no success in persuading Japan and Europe to lift their economic growth objectives above the performance of recent years. Third, the requirement that the U.S. current account must literally be balanced within any early horizon is not propitious for world economic growth. After all, amid U.S. recession, growth elsewhere hardly is apt to flourish unscathed, contrary to the view that the world can only gain by a dose of U.S. austerity.

On an optimistic view, it may not be necessary to eliminate the deficit in the U.S. current account. After all, a balanced current account amid continuing U.S. growth would steadily reduce net foreign debt as a percentage of U.S. or world GNP. Instead, as in Scenario 3, the U.S. financing goal and constraint might be specified as stabilizing the foreign debt-U.S. GNP ratio around the 15% level by the early 1990s, up from about 10% at present. A more palatable world outlook then becomes feasible provided all major players accept a mixture of cost and benefit. Thus the United States must repress its growth ambitions to a humble 2.5% annually for real GNP, implying domestic demand growth averaging 1.8% — consistent with approximate maintenance of living standards, albeit with un-

employment averaging somewhat higher than today. The dollar has to be allowed to drop, particularly during the next two years and with no precommitment to stabilizing it before the 1990s. For its part, Japan would need to *sustain* domestic demand to assure 4%-5% annual real GNP growth, and Europe some 3%. On this basis, the amended financing constraint would be met, with the current account falling distinctly below $100 billion annually in the early 1990s; and the vexing U.S. trade deficit would improve steadily, perhaps being reduced $100 billion by the end of this decade and working below $50 billion in the mid-1990s.

Scenario 3 offers an attractive vision. Unfortunately, its realism is questionable since it presumes that Japan and Europe will be willing to accept major appreciation of their currencies and take vigorous steps to boost their domestic growth. Moreover, beyond a point the markets may not be tolerant of any increase in U.S. net external debt, which in this scenario would reach well above $1 trillion in the mid-1990s and continue to rise no matter that it would have stabilized relative to GNP.

It clearly is prudent to aim for a more ambitious reduction of the U.S. financing need, against the possibility that market and political considerations will some day call a halt to U.S. external debt accumulation, quite likely on the low side of $1 trillion. With less of a debt mountain to service, the degree of merchandise trade adjustment required to rebalance the current account is reduced and the associated real economic costs of transition at home and abroad are alleviated.

Scenario 4 summarizes the implications of facing up to this more stringent financing constraint. Once again this specifies a balanced U.S. current account by 1995 but, unlike Scenario 2, it assumes that Japan and Europe succeed in boosting growth in the years ahead; and that they acquiesce in a sizable fall in the dollar, concentrated in the next two years and roughly maintaining its real effective value thereafter. The indicated cumulative depreciation through 1995 is broadly consistent with the drop already discounted in prevailing long-term government bond yields. Despite the dollar's fall, U.S. inflation does not accelerate above 4%, since it is assumed that U.S. domestic demand is held firmly in check at some cost to living standards and, potentially, considerable cost to employment. Plainly, this austerity regimen would not be popular with U.S. policymakers, let alone the electorate. It needs to be recognized, however, that no alternative exists combining realism and gratification. Debtor adjustment is never painless.

Assessment

Even if U.S. net external debt can be capped below $1 trillion, at least $500 billion in cumulative current account deficit financing will have to be assembled over the next several years. Some may doubt that the markets are up to the job. Yet, once the right interest and exchange rate expectations are in place, the capacity of markets to channel funds in new ways and on unprecedented scale should not be underestimated. Provided the dollar is allowed to find its own level quickly, unimpeded by official statements or actions lacking market credibility and creating a one-way bet on imminent dollar depreciation, foreign investors could soon rediscover a strong appetite for U.S. assets without demanding interest rates so high as would cripple the U.S. economy.

The appetite will likely be met in part through purchases of U.S. se-

curities, such as have been prominent in recent years, and also by stepped-up financing channeled through the banking system, as proved the case during the third quarter of this year. Foreign banks are likely to enlarge their role in financing U.S. firms, whether through U.S. branches or directly; U.S. banks can fill the same function, drawing funds from their foreign branches. Partly for accounting reasons and perhaps also recalling unhappy experience with Swiss franc issues in the 1970s, U.S. firms traditionally have raised funds overwhelmingly in dollar-denominated or — to a much lesser extent — hedged foreign-currency instruments. Still, traditional funding preferences should not be immutable. A realistically valued dollar would be conducive to the emergence of market terms allowing U.S. borrowers sufficient interest savings to compensate for the currency risk that foreign investors may be hesitant to carry.

One feature of the recent financing pattern that seems destined to grow in significance — and the more so as the dollar approaches or even overshoots a sustainable level — is the upswing in foreign direct investment in the United States. This has occurred despite the exchange risk to the investors concerned, some of whom are motivated in part by the much publicized risks of U.S. protectionism. The inflow will come not only from Japan but also from Korea and Europe. Given that the stock market valuation of all U.S. companies is on the order of $2 trillion, it is unlikely that direct investment will amount cumulatively to an unduly large fraction of U.S. business generally. However, it is quite possible that foreign investment will seek to concentrate in selected industries, potentially stirring domestic political repercussions (recall Europe's anxieties twenty years ago over U.S. direct investment activity then). Conversely, U.S. firms may undo in some degree their direct investment abroad, particularly in areas where local markets prove disappointing and production costs unattractive compared with the United States or where asset disposals fetch attractive prices in dollar terms. As for equity portfolio investment, to the extent that a more competitive dollar boosts the prospects of U.S. firms, foreign investors should find U.S. equities relatively appealing, no matter that the global crash has tarnished the luster of most equity holdings for the time being.

The resources of the global financial markets ensure that private capital inflows have the potential to cover the prospective U.S. external financing need in the years ahead. Realizing their potential, however, requires that the right incentives be present amid confidence that the United States recognizes the dangers of neglecting its growing indebtedness to the world and is playing its part to avert the attendant risks.

The road ahead looms rocky today because neither the incentives nor the confidence are firmly in place. The time still is not ripe for a new attempt at fixing the dollar, while the markets correctly sense that no credible international adjustment package will be forthcoming anytime soon: the required political will still is lacking, particularly in the United States as the 1988 elections draw close; Europe's growth ambitions continue truncated; Japan is in a phase of self-congratulation; and Korea and Taiwan have barely begun to rethink their export-driven growth strategies.

The foregoing analysis concludes that the dollar still must go lower, and preferably quickly, to foster trade adjustment, facilitate financ-

ing, and induce both the deficit and surplus countries to correct their domestic growth policies. It would be premature to accede now to suggestions that the U.S. government issue special foreign-currency denominated bonds and engage in massive intervention to support the dollar.* When policy fundamentals are out of joint, such devices serve only to delay correction. Besides, they are soon overwhelmed by market forces — a truth of which the traumatic demise of last February's Louvre accord has provided ample demonstration. With that trauma still fresh in mind, the G-7's pre-Christmas statement will prove ill-judged if interpreted as a fresh commitment to exchange rate stabilization. That can only be viable once supporting fundamental policy corrections are firmly in place and adequate to the adjustment task. They are not yet so today.

*Such foreign-currency bonds, dubbed "Reagan" bonds, would resemble the "Carter" bonds targeted to foreign investors in 1978. Some foreign opinion holds that incurring foreign-currency liabilities would bring the United States more properly in line with other debtor nations, forcing it to bear more fully the cost of unwarranted dollar depreciation, rather than inflict that cost on foreign creditors, and thereby strengthen U.S. self-interest in dollar stabilization. On much the same grounds, it is argued that the Federal Reserve should participate more equally with foreign central banks in exchange market intervention to support the dollar. This would lessen the budgetary costs that foreign governments sustain when their central banks experience home-currency losses on reserve holdings. Of course, the major central banks well understand that accounting gains and losses on reserves accrued through exchange rate management do not betoken success or failure in the ordinary portfolio management sense. Still, in practice, the potential for such losses, together with worry over the effects of intervention on domestic money supplies, puts something of a cap on cumulative intervention volume.

Statistical appendix

For key to data in tables see April 1987 issue.

Effective exchange rates — industrial countries, 16

Real effective exchange rates — developing countries, 17

International banking market size, 17

International bond issues and bank credits, 18

Eurocurrency deposit rates, 19

International bond yields, 19

Central bank discount rates, 20

Day-to-day money rates, 20

Treasury bill rates, 21

Representative money market rates, 21

Commercial bank deposit rates, 22

Domestic government bond yields, 22

Commercial bank lending rates to prime borrowers, 23

Domestic corporate bond yields, 23

Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

Effective exchange rates — industrial countries

Index numbers, 1980-82 average=100.

	United States	Canada	Japan	Australia	France	Germany	Italy	United Kingdom	Austria	Belgium	Neth-erlands	Spain	Swit-zerland	Den-mark	Norway	Swe-den
Nominal against 15 other industrial-country currencies																
1982	109.8	99.4	98.6	100.0	93.1	102.8	92.8	98.1	101.7	92.3	102.7	94.0	106.3	95.7	101.7	92.8
1983	114.2	100.8	107.8	92.0	87.3	107.5	90.3	91.6	103.6	90.0	105.0	78.4	111.5	96.4	99.5	82.2
1984	122.3	97.3	112.9	94.2	84.4	107.3	86.7	88.1	103.6	88.9	103.9	77.4	110.5	93.9	97.8	84.3
1985	127.0	92.8	115.9	76.3	85.5	107.8	82.1	88.2	104.2	89.6	104.0	75.6	109.5	95.1	95.6	83.9
1986	106.0	87.6	150.1	61.4	87.4	116.1	82.9	80.7	107.8	92.9	110.3	73.4	118.1	99.7	89.2	81.6
1987																
January	98.5	88.1	156.1	57.2	87.4	122.2	84.0	74.8	110.4	95.9	114.9	71.9	121.7	103.9	83.8	79.9
February	96.9	89.7	156.4	57.2	87.9	122.7	83.9	74.8	110.7	96.4	115.0	71.3	121.4	104.6	84.4	80.0
March	96.0	90.5	157.9	58.3	87.3	121.7	83.3	78.1	110.3	95.7	114.1	71.1	121.4	103.7	84.8	80.6
April	94.0	90.2	165.9	59.1	87.2	121.4	82.9	78.8	110.0	95.5	114.1	71.1	123.0	103.2	85.3	80.6
May	93.5	88.4	168.2	58.7	87.1	121.7	82.1	79.8	110.1	95.6	114.3	71.4	123.8	103.6	85.8	80.4
June	94.8	88.8	164.7	59.9	87.1	121.6	81.8	79.1	110.2	95.6	114.3	71.9	122.7	103.4	86.5	80.5
July	96.0	90.0	159.1	60.0	87.2	121.4	81.6	79.2	110.2	95.4	114.2	72.5	122.2	102.4	87.2	80.4
August	95.7	90.0	162.7	59.8	86.8	121.3	81.5	78.9	110.1	95.2	114.1	73.6	122.6	101.3	87.3	80.2
September	93.9	90.3	165.4	60.5	86.9	121.5	81.7	79.6	110.1	95.3	114.4	74.6	122.7	100.6	87.4	79.9
October	93.4	90.7	165.1	58.9	86.7	121.3	81.7	80.0	115.7	95.1	114.5	75.9	122.3	101.3	87.0	79.6
November	90.0	89.3	171.2	54.3	86.7	123.6	81.2	81.5	110.9	95.6	115.9	75.6	125.4	102.5	85.2	79.2
October 30	92.1	89.8	167.9	55.9	86.8	122.5	81.6	80.5	110.4	95.3	115.0	76.5	124.0	101.9	86.2	79.4
November 6	90.6	89.1	170.6	54.1	86.6	123.5	81.0	81.3	110.8	95.6	115.7	75.9	125.0	102.3	85.8	79.3
13	89.9	89.1	171.2	54.3	86.7	123.5	81.3	81.3	110.9	95.6	116.7	75.6	125.5	102.5	85.5	79.1
20	90.1	89.5	171.0	55.1	86.8	123.4	81.4	81.4	110.8	95.5	115.6	75.4	125.5	102.5	85.4	79.2
27	89.3	89.5	171.4	54.6	86.9	123.1	80.9	81.7	110.8	95.2	115.4	75.0	125.2	102.5	84.3	79.0
December 4	88.3	89.3	173.2	55.2	86.7	123.8	81.3	82.2	110.9	95.7	115.9	75.5	126.2	102.8	83.9	79.0
11	88.4	89.6	175.3	55.2	86.9	123.6	81.2	82.1	110.8	95.7	115.8	75.3	126.3	102.8	83.8	79.0
Real against 15 other industrial-country currencies																
1981	100.8	99.5	104.7	102.6	100.0	96.9	98.9	102.5	99.4	101.4	97.1	99.6	98.7	98.9	101.3	101.9
1982	109.3	100.6	92.4	105.7	97.3	99.9	98.5	98.8	101.2	91.9	100.5	98.9	103.0	97.9	103.2	95.6
1983	112.7	102.6	96.8	101.8	94.7	101.0	101.1	93.1	102.0	88.6	100.8	88.9	105.1	100.4	102.0	90.8
1984	119.6	100.2	97.8	106.4	97.0	98.0	101.0	90.2	103.0	85.9	97.8	91.1	100.1	99.2	100.5	96.0
1985	122.4	96.4	96.6	89.5	100.5	96.7	100.2	92.9	103.3	85.3	96.6	92.5	98.0	101.2	99.5	96.9
1986	101.5	93.4	119.3	78.9	103.9	103.4	102.6	87.4	106.6	84.6	101.4	94.0	105.6	107.5	97.1	96.0
1987																
June	91.2	95.6	124.8	82.7	105.4	106.0	103.1	87.6	110.1	84.3	104.7	94.4	109.3	112.5	101.1	95.6
July	92.6	97.0	120.7	83.3	105.8	105.8	102.8	87.8	111.4	84.1	102.8	95.2	108.6	111.2	102.1	95.6
August	92.1	97.3	123.6	84.2	105.2	105.7	103.0	87.4	111.6	83.9	102.9	96.5	108.6	110.3	101.6	95.5
September	90.4	97.4	125.7	85.8	105.2	105.9	103.0	88.2	110.3	83.7	103.8	98.2	108.3	110.0	103.5	95.3
October	90.5	97.5	124.9	84.2	104.6	104.9	103.2	88.7	116.3	83.2	105.2	99.8	108.7	110.5	103.9	94.7
November	87.0	96.2	129.1	78.5	105.4	106.6	102.6	90.3	111.6	83.7	106.6	99.4	111.1	111.7	102.5	94.5
Real against 18 other industrial-country and 22 LDC currencies																
1981	99.8	99.4	104.7	102.5	99.5	96.2	98.2	101.9	98.9	100.9	96.8	98.9	98.1	98.7	101.3	101.5
1982	109.7	101.7	94.0	105.2	96.9	99.4	98.1	98.5	101.1	91.5	99.5	98.9	102.6	97.7	102.9	95.4
1983	114.9	104.6	100.4	102.0	94.4	100.6	100.8	93.1	102.1	88.2	99.5	89.2	105.1	100.3	101.9	91.0
1984	120.8	102.7	102.4	106.7	96.4	96.8	101.0	89.7	102.6	85.0	95.9	91.3	99.8	99.0	100.5	95.8
1985	123.9	99.2	101.6	90.1	100.0	95.8	99.8	92.4	102.9	84.5	94.8	93.2	97.8	101.2	99.8	96.9
1986	107.1	94.5	124.0	80.8	104.5	104.5	104.1	88.2	107.4	85.1	101.4	96.6	107.5	108.0	97.9	96.8
1987																
June	97.3	95.8	128.7	84.3	106.6	108.2	105.6	89.2	111.5	85.5	105.6	97.8	112.1	113.4	102.1	96.8
July	98.4	97.3	124.6	84.6	106.9	108.0	105.2	89.4	112.8	85.2	103.6	98.6	111.4	112.1	103.1	96.8
August	98.0	97.6	127.6	85.5	106.2	107.8	105.3	88.9	113.0	85.0	103.6	99.8	111.3	111.1	102.6	96.6
September	96.2	97.5	129.5	86.9	106.2	108.0	105.3	89.8	111.6	84.7	104.6	101.6	111.0	110.8	104.4	96.5
October	96.1	97.6	128.5	85.1	105.7	107.1	105.6	90.3	117.8	84.3	106.0	103.2	111.4	111.5	104.9	96.0
November	92.8	95.9	132.2	79.8	106.7	109.2	105.3	92.2	113.2	85.1	107.8	103.1	114.1	112.7	103.5	95.9

Real effective exchange rates — developing countries

Index numbers, 1980-82 average=100.

	Argentina	Brazil	Chile	Colombia	Mexico	Peru	Venezuela	Hong Kong	Indonesia	Korea	Malaysia	Philippines	Singapore	Taiwan	Israel	Turkey
1981	107.7	103.3	108.3	100.6	114.6	103.4	99.7	98.7	99.8	100.3	99.4	101.3	102.0	101.8	99.2	104.6
1982	77.0	113.0	97.3	105.9	82.7	104.6	110.2	101.4	111.7	101.9	105.6	106.7	100.8	96.6	108.7	95.9
1983	71.6	86.0	89.3	104.9	79.0	98.4	117.3	95.0	96.2	97.6	113.9	96.1	101.8	94.6	120.8	93.4
1984	80.2	85.7	90.1	99.6	91.9	105.8	85.9	99.5	96.0	96.5	119.6	107.9	102.5	97.1	119.5	91.1
1985	71.2	85.0	79.7	85.6	90.6	96.3	93.0	103.5	94.7	89.2	116.3	114.6	95.7	94.6	106.6	91.4
1986	61.0	74.5	68.7	67.7	65.1	93.8	85.7	93.6	71.6	75.8	94.6	90.2	80.3	88.7	100.9	71.0
1987																
January	56.3	75.9	65.6	65.5	60.8	107.7	49.9	89.3	56.1	74.1	89.6	87.6	76.5	88.4	94.6	63.7
February	55.5	71.7	66.1	65.8	61.2	110.9	53.6	88.3	56.0	73.7	89.9	85.0	74.8	88.7	93.4	63.3
March	53.3	71.3	66.7	65.0	62.1	112.8	56.9	89.3	55.2	73.8	90.1	84.5	74.2	89.2	94.6	64.1
April	53.1	75.4	65.9	63.6	62.1	115.4	57.6	88.8	53.6	73.5	90.7	83.8	73.1	89.6	95.1	63.4
May	53.1	75.7	66.0	62.7	63.1	118.1	59.9	89.8	53.8	74.1	90.2	84.0	73.3	92.0	95.0	64.1
June	53.7	75.4	65.8	62.9	65.1	121.7	61.9	90.8	54.7	76.1	90.0	86.4	73.8	94.8	96.9	63.1
July	53.5	73.1	65.8	64.1	68.4	131.4	64.0	90.1	56.0	77.7	91.6	88.8	74.3	95.8	98.8	62.7
August	54.7	71.3	66.3	63.2	69.8	140.7	63.2	89.6	55.8	77.3	91.3	88.6	74.6	96.9	99.8	63.0
September	53.8	71.2	65.5	62.9	71.7	147.5	63.2	89.8	54.8	76.7	90.1	86.9	73.9	95.7	100.0	61.3
October	54.1	73.4	65.3	62.5	73.4	147.9	63.7	90.1	55.1	76.0	88.8	87.8	73.3	94.9	100.5	60.4
November	54.6	70.1	62.5	61.6	73.1	128.3	62.6	89.3	55.0	73.5	87.7	85.6	73.5	92.3	98.5	57.5

International banking market size

at end of period, billions of dollars

	1982	1983	1984	1985	1986			1987	
					Jun	Sep	Dec	Mar	Jun
Gross claims									
Eurocurrencies, on residents and nonresidents	**2 146**	**2 253**	**2 359**	**2 833**	**3 040**	**3 347**	**3 560**	**3 811**	**3 942**
On nonbanks	634	665	694	822	875	914	938	995	1 175
On banks	1 512	1 588	1 665	2 011	2 165	2 433	2 622	2 817	2 767
In dollars	1 694	1 797	1 894	2 101	2 166	2 381	2 534	2 602	2 753
In other currencies	452	456	465	732	874	966	1 025	1 209	1 189
Domestic currencies, on nonresidents	**398**	**402**	**402**	**506**	**578**	**633**	**672**	**721**	**757**
On nonbanks	132	140	142	187	201	211	209	229	236
On banks	266	262	260	319	377	422	463	492	521
In dollars	211	221	215	215	210	219	227	206	215
In other currencies	187	181	187	291	368	414	445	515	542
Total	**2 544**	**2 655**	**2 761**	**3 339**	**3 618**	**3 980**	**4 232**	**4 532**	**4 699**
On nonbanks	766	805	836	1 009	1 076	1 125	1 147	1 224	1 411
On banks	1 778	1 850	1 925	2 330	2 542	2 855	3 085	3 309	3 288
In dollars	1 905	2 018	2 109	2 316	2 376	2 600	2 761	2 808	2 968
In other currencies	639	637	652	1 023	1 242	1 380	1 470	1 724	1 731
Gross liabilities									
Eurocurrencies, to residents and nonresidents	**2 168**	**2 278**	**2 386**	**2 846**	**3 059**	**3 384**	**3 579**	**3 851**	**3 999**
To nonbanks	432	479	497	585	632	660	685	740	768
To official monetary institutions	91	88	96	112	109	110	109	125	139
To other banks	1 645	1 711	1 793	2 149	2 318	2 614	2 786	2 986	3 085
In dollars	1 741	1 846	1 950	2 147	2 204	2 425	2 553	2 648	2 785
In other currencies	427	432	436	699	855	959	1 026	1 203	1 214
Domestic currencies, to nonresidents	**250**	**260**	**280**	**377**	**418**	**464**	**494**	**556**	**580**
To nonbanks	70	73	80	114	121	121	116	134	144
To banks	180	187	200	263	297	343	377	422	436
In dollars	116	135	148	169	171	191	192	192	197
In other currencies	134	125	134	208	247	273	302	364	383
Total	**2 418**	**2 538**	**2 666**	**3 223**	**3 477**	**3 848**	**4 073**	**4 407**	**4 579**
To nonbanks	502	552	577	699	753	781	801	874	912
To banks and official institutions	1 916	1 986	2 089	2 524	2 724	3 067	3 272	3 533	3 660
In dollars	1 857	1 981	2 096	2 316	2 375	2 616	2 745	2 840	2 982
In other currencies	561	557	570	907	1 102	1 232	1 328	1 567	1 597
Net market size	**1 285**	**1 382**	**1 430**	**1 676**	**1 800**	**1 912**	**1 979**	**2 083**	**2 170**

International bond issues and bank credits

millions of dollars

	1984	1985	1986	1987			Jan-Oct	
				Aug	Sep	Oct	1987	1986
By country of borrower								
Industrial countries	**177 077**	**226 711**	**270 231**	**15 182**	**19 018**	**10 633**	**188 408**	**226 717**
Australia	5 816	14 407	20 106	305	1 261	288	10 074	17 238
Austria	2 254	2 435	3 581	418	204	396	3 509	3 281
Belgium	1 847	3 269	4 952	626	217	8	3 730	4 767
Canada	13 124	17 184	21 633	356	542	772	8 236	14 937
Denmark	4 825	3 589	9 633	78	157	53	4 179	6 844
Finland	1 713	1 846	3 445	244	104	256	2 832	2 763
France	11 298	18 773	19 701	438	618	606	10 292	16 148
Germany	2 165	3 452	11 927	1 183	850	195	10 095	10 191
Greece	1 551	1 567	1 317	158	184	—	1 018	1 155
Ireland	1 377	1 881	4 179	80	420	185	1 838	3 849
Italy	6 933	11 033	12 962	200	2 495	293	8 264	11 550
Japan	17 526	21 269	35 506	5 262	4 657	3 459	41 801	28 995
Netherlands	1 973	2 299	3 579	—	376	104	4 322	2 999
New Zealand	3 208	2 707	8 078	308	430	277	4 086	6 123
Norway	1 324	3 905	6 644	499	1 098	38	5 486	5 382
Portugal	1 796	2 382	2 433	—	25	102	2 053	2 377
South Africa	1 422	825	—	—	—	—	—	—
Spain	4 931	3 913	7 015	125	129	—	1 249	6 085
Sweden	11 256	9 890	8 020	137	522	147	4 865	7 532
United Kingdom	8 899	25 424	24 295	959	1 328	1 190	21 723	22 325
United States	65 054	69 193	56 774	3 456	1 702	1 870	33 218	48 702
*Other**	6 785	5 447	4 448	347	1 699	394	5 536	3 472
Developing countries	**39 725**	**32 139**	**24 317**	**2 613**	**950**	**718**	**23 426**	**20 212**
Latin American countries	**17 464**	**8 115**	**3 192**	**1 950**	—	—	**10 571**	**2 747**
Argentina	4 212	3 700	17	1 950	—	—	1 950	17
Brazil	6 649	—	219	—	—	—	—	50
Chile	784	1 085	—	—	—	—	—	—
Colombia	589	1 052	89	—	—	—	50	89
Mexico	3 918	109	313	—	—	—	7 700	313
Venezuela	—	48	—	—	—	—	30	—
*Other***	1 312	2 121	2 554	—	—	—	841	2 277
Asian countries	**15 893**	**18 410**	**15 291**	**648**	**661**	**481**	**10 175**	**12 472**
India	945	818	1 721	25	55	114	1 628	1 051
Indonesia	1 924	451	1 358	35	—	—	895	1 008
Korea	6 201	5 898	3 134	242	158	—	2 271	2 846
Malaysia	2 605	2 219	1 328	—	—	—	428	1 328
Philippines	925	925	—	—	—	—	—	—
Thailand	1 221	1 497	1 401	38	115	—	388	1 044
Other	2 072	6 602	6 350	308	333	366	4 565	5 195
Middle Eastern and African countries	**6 368**	**5 613**	**5 834**	**15**	**289**	**237**	**2 680**	**4 993**
Algeria	821	1 450	1 344	—	—	49	319	996
Nigeria	985	—	—	—	—	—	—	—
Turkey	741	1 203	2 637	—	289	118	1 830	2 277
Other	3 821	2 960	1 853	15	—	70	531	1 720
Eastern European countries	**3 244**	**5 236**	**4 091**	—	**322**	**80**	**2 811**	**3 791**
Hungary	1 386	1 577	1 315	—	282	—	1 397	1 315
Soviet Union	1 051	1 489	1 821	—	40	80	814	1 521
*Other****	807	2 169	955	—	—	—	600	955
International organizations****	**13 287**	**20 635**	**18 916**	**1 026**	**2 118**	**1 026**	**16 306**	**15 474**
By type of instrument and currency								
International bond issues	**107 411**	**167 756**	**226 393**	**13 541**	**13 478**	**9 539**	**157 313**	**194 316**
Eurobonds	79 458	136 731	187 952	10 090	9 577	6 468	127 781	163 250
U.S. dollar	63 593	97 782	118 220	7 052	5 385	3 250	55 878	102 796
German mark	4 604	9 491	16 870	520	830	693	12 739	15 570
British pound	3 997	5 766	10 510	648	697	844	12 855	10 164
Japanese yen	1 212	6 539	18 673	185	369	507	18 669	15 543
European composite units	3 032	7 038	6 965	389	381	115	6 481	5 508
Other	3 020	10 114	16 713	1 296	1 895	1 060	21 158	13 669
Foreign bonds	27 953	31 025	38 441	3 451	3 902	3 071	29 532	31 067
U.S. dollar	5 487	4 655	6 064	50	1 011	800	3 911	3 764
German mark	2 243	1 741	—	—	—	—	—	—
British pound	1 292	958	322	—	—	—	—	321
Swiss franc	12 626	14 954	23 401	2 707	2 050	1 966	20 182	19 680
Japanese yen	4 628	6 379	4 756	297	282	49	2 420	4 072
Other	1 677	2 339	3 898	397	558	256	3 018	3 229
International bank credits	**125 922**	**116 764**	**91 164**	**5 279**	**8 930**	**2 917**	**73 638**	**71 878**
Eurocurrency credits	112 605	110 317	82 755	4 337	7 860	2 579	65 427	64 892
Foreign credits	13 317	6 647	8 409	942	1 070	338	8 211	6 986
Total	**233 333**	**284 720**	**317 556**	**18 820**	**22 408**	**12 456**	**230 951**	**266 194**

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

Eurocurrency deposit rates

prime banks' bid rates, at or near end of month

	1984	1985	1986	1987						
	Dec	Dec	Dec	May	Jun	Jul	Aug	Sep	Oct	Nov
Eurodollar										
overnight	8.63	12.25	22.00	6.69	6.44	6.62	6.81	8.25	6.75	6.62
one month	8.38	8.00	6.50	7.12	6.94	6.75	7.12	7.75	7.06	8.25
three months	8.63	7.88	6.25	7.25	7.06	7.00	7.19	8.37	7.62	7.94
six months	9.13	7.88	6.12	7.44	7.25	7.25	7.44	8.50	7.69	7.94
twelve months	9.81	7.94	6.12	7.94	7.62	7.69	7.94	9.00	8.00	8.19
Euro-Canadian dollar										
one month	9.88	9.00	8.00	7.87	8.06	8.94	9.12	9.19	7.69	8.56
three months	10.81	9.00	8.12	8.12	8.19	9.12	9.25	9.69	8.19	9.00
six months	10.06	9.00	8.19	8.44	8.37	9.56	9.62	10.19	8.50	9.12
twelve months	10.44	9.00	8.31	8.87	8.69	9.87	10.00	10.69	8.87	9.44
Euro-French franc										
one month	10.69	12.50	10.12	8.00	8.06	7.81	7.81	7.81	9.00	9.37
three months	10.69	13.00	10.37	8.19	8.37	8.12	8.19	8.31	9.00	9.37
six months	11.00	13.13	9.75	8.37	8.56	8.56	8.81	8.69	9.00	9.37
twelve months	11.38	12.25	8.75	8.62	9.00	9.12	9.31	9.19	9.00	9.37
Euromark										
one month	5.50	4.75	5.12	3.75	3.62	3.87	4.00	4.12	3.69	3.94
three months	5.50	4.75	4.87	3.75	3.81	3.94	4.06	4.56	4.12	3.94
six months	5.56	4.75	4.81	3.75	3.81	4.12	4.31	4.75	4.25	4.06
twelve months	5.56	4.81	4.81	3.87	3.87	4.00	4.44	4.81	4.44	4.12
Euro-Dutch guilder										
one month	5.69	5.75	6.31	5.06	5.19	5.25	5.19	5.25	5.12	4.81
three months	5.75	5.75	6.00	5.06	5.19	5.31	5.31	5.56	5.25	4.94
six months	5.81	5.81	5.87	5.12	5.19	5.37	5.37	5.62	5.37	5.00
twelve months	5.94	5.88	5.81	5.12	5.19	5.44	5.50	5.75	5.44	5.12
Euro-Swiss franc										
one month	4.44	3.88	3.94	4.25	3.69	3.62	3.94	3.69	2.87	4.94
three months	4.56	4.00	3.94	3.87	3.81	3.81	3.75	4.37	3.87	4.06
six months	4.63	4.00	3.87	3.87	3.81	3.94	4.00	4.37	3.87	4.06
twelve months	4.69	4.06	3.87	3.87	3.87	4.00	4.06	4.37	3.87	4.06
Eurosterling										
one month	9.50	11.69	11.12	8.87	9.12	9.00	10.00	10.19	9.37	9.00
three months	9.88	11.81	11.12	8.81	9.19	9.44	10.50	10.37	9.44	8.94
six months	10.00	11.81	11.06	8.81	9.19	9.69	10.75	10.50	9.44	9.00
twelve months	10.19	11.69	11.06	9.06	9.31	10.06	11.00	10.69	9.50	9.12
Euroyen										
one month	6.19	7.13	4.56	4.00	3.81	3.62	4.00	4.37	4.37	4.75
three months	6.19	6.56	4.50	3.87	4.00	4.06	4.06	5.00	4.50	4.44
six months	6.13	6.50	4.37	3.87	4.00	4.12	4.19	5.19	4.50	4.37
twelve months	6.13	6.38	4.31	3.94	4.06	4.25	4.31	5.25	4.62	4.44
European currency unit										
one month	9.25	9.63	8.56	6.69	6.56	6.62	6.75	6.87	7.19	6.94
three months	9.38	9.63	8.44	6.87	6.75	6.19	7.00	7.37	7.44	7.00
six months	9.50	9.63	8.06	7.00	6.94	6.94	7.25	7.56	7.44	6.94
twelve months	9.63	9.63	7.31	7.12	7.12	7.12	7.37	7.68	7.62	7.06

International bond yields

average yield of several actively traded, high quality issues with a maturity of 7 to 12 years
at or near end of month

	1985	1986	1987							
	Dec	Dec	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
United States companies										
Eurodollar	9.68	8.67	8.78	9.53	9.78	10.11	9.82	9.99	10.95	10.41
Euromark	6.73	6.62	6.56	6.59	6.57	6.65	7.04	6.82	6.87	7.04
Swiss franc	5.49	5.70	5.68	5.55	5.52	5.50	5.57	5.43	5.50	5.83
European governments										
Eurodollar	10.52	9.91	10.08	11.00	11.24	11.14	11.22	11.41	11.81	11.63
Euromark	7.03	6.77	6.50	6.33	6.35	6.36	6.55	6.65	6.76	6.61
Swiss franc	4.91	4.51	4.37	4.27	4.34	4.33	4.33	4.38	4.39	4.54
European currency unit	10.23	10.20	10.26	13.07	10.32	10.51	10.40	10.43	10.46	11.10

Central bank discount rates

at or near end of month

	1984	1985	1986	1987					Current	
	Dec	Dec	Dec	Jul	Aug	Sep	Oct	Nov	Dec 11 1987	effective since
United States	8.00	7.50	5.50	5.50	5.50	6.00	6.00	6.00	6.00	Sep 24, 87
Canada	10.09	9.49	8.47	9.22	9.24	9.57	8.09	8.56	8.70	Dec 3, 87
Austria	4.50	4.00	4.00	3.50	3.50	3.50	3.50	3.50	3.00	Dec 3, 87
Belgium	11.00	9.75	8.00	7.25	7.25	7.25	7.25	7.25	7.00	Dec 4, 87
Denmark	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Oct 27, 83
Finland	9.50	9.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	May 19, 86
France	9.50	9.50	9 50	9.50	9.50	9.50	9.50	9.50	9.50	Aug 31, 77
Germany	4.50	4.00	3 50	3.00	3.00	3.00	3.00	3.00	2.50	Dec 3, 87
Ireland	14.00	10.25	13 25	10.25	10.25	9.75	9.75	9.75	9.75	Sep, 87
Italy	16.50	15.00	12 00	11.50	12.00	12.00	12.00	12.00	12.00	Aug 28, 87
Netherlands	5.00	5.00	4.50	4.50	4.50	4.50	4.50	4.00	3.75	Dec 4, 87
Portugal	25.00	19.00	16 00	15.00	15.00	15.00	14.50	14.50	14.50	Oct, 87
Spain	8.00	8.00	8.00	8.00	8 00	8 00	8.00	8.00	8.00	Jul 26, 77
Sweden	9.50	10.50	7.50	7.50	7 50	7 50	7.50	7.50	7.50	Sep 19, 86
Switzerland	4.00	4.00	4.00	3.50	3.50	3 50	3.50	3.00	2.50	Dec 4, 87
United Kingdom	9.38	11.31	10.81	8.87	9.87	9.87	9.37	8.87	8.38	Dec 3, 87
Japan	5.00	5.00	3.00	2.50	2 50	2.50	2.50	2.50	2.50	Feb 23, 87
New Zealand	13.50	19.80	24.60	19 20	18.55	19.20	21.90	21.90	21.90	Oct, 87
South Africa	21.75	13.50	10.00	10.00	10.00	10.00	10.00	10.00	10.00	Dec 10, 86
Argentina*	18.19	5.00	11.19	12.80	15.20	15.70	17.00	17.00	17.00	Oct, 87
Korea	5.00	5.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	Jul 10, 86
Philippines	12.11	11.50	9.64	9.01	9.02	9.10	9.13	9.13	9.13	Oct, 87
Singapore	6.75	5.00	5 00	5.00	5.00	5.00	5.00	5.00	5.00	Jul, 85
Venezuela	11.00	12.94	12.79	12.92	12.63	10.00	10.00	10.00	10.00	Sep, 87

*Percent per month.

Day-to-day money rates

monthly averages

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	8.38	8.27	6.71	6.35	6.85	6.72	6.58	6.82	7.21	7.32	6.67
Canada	10.50	9.23	8.28	7.10	7.41	8.35	8.53	8.72	8.80	8.41	8.16
Austria	7.63	7.25	7.62	4.25	3.80	3.95	4.10	4.10	4.12	4.60	4.20
Belgium	9.12	6.60	5.09	5.65	5.41	5.42	5.62	4.82	5.24	7.07	n.a.
Finland	15.07	11.96	11 97	11.14	11.00	11.00	11.00	11.00	11.00	11.00	11.00
France	10.95	9.02	7.80	7.91	8.02	8.01	7.46	7.41	7.38	7.69	n.a.
Germany	5.62	4.64	5.00	3.75	3.69	3.61	3.73	3.78	3.71	3.74	3.66
Ireland	14.50	9.62	13 00	13.25	12.00	11.00	9.00	8.25	8.75	6.50	8.50
Italy	17.25	14.75	11.42	10.56	10.25	10.78	10.95	11.09	11.70	n.a.	n.a.
Netherlands	5.60	5.75	6.19	5.19	5.20	5.19	5.19	4.84	4.75	5.19	4.44
Norway	12.50	12.50	14.00	14.00	14.00	14.00	n.a	n.a.	n.a.	n.a.	n.a.
Spain	12.18	9.92	11.76	17.32	20.18	18.12	18.09	17.68	17.45	16.22	14.60
Sweden	11.88	11.83	8.89	8.70	8 71	8.22	8.61	8.50	8.51	10.00	8.75
Switzerland	1.50	2.00	1.12	1.75	1.37	2.25	2 00	1.50	1.37	1.25	1.50
United Kingdom	6.31	9.72	9.19	9.61	8.78	9.16	8.78	9.12	9.72	9.68	9.13
Australia	10.98	18.37	15.40	14.71	13.45	12.79	12.08	11.90	11.58	n.a.	n.a.
Japan	6.41	8.02	4.18	3.52	3.16	3.16	3.17	3.20	3.25	3.39	3.37
South Africa	21.13	12.50	8.50	8.31	8.37	8.00	8.56	n.a.	8.45	n.a.	n.a.
Argentina*	17.75	4.50	7.00	5.50	6.00	8.00	9.00	11.17	12.50	9.00	9.80
Brazil	272.02	352.23	83.05	853.00	n.a.	n.a.	n.a.	153.78	150.10	150.10	329.33
Hong Kong	6.80	6.10	3.90	4.11	4.20	6.45	5.33	5.54	3.67	4.92	1.90
Korea	10.00	8.80	9 00	8.40	8.50	8.90	8.90	10.00	9.50	10.00	n.a.
Philippines	15.22	15.03	9.92	13.29	11.26	8.13	9.17	8.46	16.50	12.94	n.a.
Singapore	6.01	4.53	3.51	3.31	4.39	2.57	3.33	2.91	2.52	3.55	n.a.
Taiwan	8.07	4.50	3.00	3.50	3.50	3.50	5.50	n.a.	n.a.	n.a.	n.a.

*Percent per month.

Treasury bill rates

bond equivalent yields, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	7.99	7.25	5.73	5.61	5.82	5.90	6 11	6.41	6.82	5.41	5.50
Canada	9.84	9.24	8.22	8.08	8.19	8.29	8.97	8.99	9.32	7.84	8.31
Belgium	10.90	9.89	7.50	7.35	7.15	6.84	6.74	6.74	6.74	n.a.	n.a.
Ireland	15.10	11.15	13.60	11.29	10.86	10.46	9 56	9.93	8.93	8.80	9.10
Italy	14.69	13.10	10 00	9.60	9.60	9.60	10.53	10 92	n.a.	n.a.	n.a.
Netherlands	5.88	5.69	6.37	5.31	5.31	4.75	5.25	5.62	5.62	5.50	5.25
Spain	12.27	9.52	8.37	9.61	10.40	9.59	8 61	7.10	6.73	8.23	6.78
Sweden	11.83	12.49	9.20	9.25	9.16	8.60	9.11	9.25	n.a.	9.49	9.20
United Kingdom	9.33	11.49	10.79	9.39	8.68	8.96	9.14	10.12	10.02	9.07	8.67
Australia	12.27	19.40	14 91	14.00	13.01	12.23	12.04	11.91	11.09	10.47	10.15
Japan	4.91	4.91	2.89	2.38	2.38	2.38	2 38	2.38	2.38	2.38	2.38
New Zealand	13.50	17.62	19.69	25.29	19.48	18.40	n.t.	19.38	n.t.	n.a.	n.a.
South Africa	21.94	12.99	8.84	8.60	8.96	8.64	8.74	8.70	8.72	8.68	8.64
Brazil	273.03	379.77	149.00	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mexico	48.67	72.98	104.03	99.01	98 60	98.40	96 86	95.95	95.47	95.76	n.a.
Philippines	47.14	16.45	9.55	11.80	11.65	11.20	10.91	11.67	12.60	12.97	13.18
Singapore	2.91	2.94	2.10	2.12	2.61	2.63	2.97	3.01	3.26	3.57	n.a.

Representative money market rates

bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	8.34	8.01	8 04	6.98	7.12	7.10	6.98	7.10	7.94	7.58	7.80
Canada	10.00	9.40	8.35	8.15	8.30	8.45	9.20	9.15	9.25	8.50	8.70
Belgium	10.85	9.89	7.60	7.40	7.30	7.00	6.84	6.79	6.79	n.a.	7.15
France	10.69	9.12	8.37	8.00	8.12	8.25	7.87	7 81	7.87	8.25	8.62
Germany	5.75	4.80	4.85	3.80	3.65	3.65	3.85	3.85	4.55	4.10	3.80
Ireland	15.13	12.00	14.06	10.87	11.19	10.50	9.87	9.94	9.94	9.25	9.19
Italy	16.88	15.13	11 37	10.00	10.50	11.00	11.12	12.37	12.37	12.00	11.62
Netherlands	5.75	5.75	6.19	5.31	5.25	5.25	5.37	5.25	5.38	5.25	4.94
Portugal	24.57	20.71	16 07	14.96	14.90	15.05	15.07	15.09	n.a.	14.66	14.19
Spain	12.21	10.51	11.79	17.09	19.80	18.29	17.56	16.83	16.86	15.84	14.44
Switzerland	5.00	4.75	4.50	3.75	3.87	3.81	3.94	3.75	4.25	4.06	4.06
United Kingdom	9.88	12.75	11.25	9.25	9.00	9.25	9.44	10.31	10.19	9.19	8.87
Australia	12.90	19.75	15.10	14.50	13.80	13.35	12.40	12.50	11.25	13.45	12.25
Japan	6.33	7.03	4.34	3.89	3.70	3.73	3.74	3.71	3.84	3.88	3.90
New Zealand	15.00	20.00	24.25	25.70	20.35	18.75	18.70	18.30	18.90	n.a.	n.a.
South Africa	22.78	13.35	8.55	9.10	9.00	8.80	8.80	8.85	8.90	8.90	8.50
Chile	20.68	22.42	19.56	22.42	28.32	14.03	18.16	25.34	26.82	31.37	34.49
Hong Kong	8.25	6.50	4.62	5.50	6.25	6.87	6.19	6.56	6.37	6.19	4.06
Indonesia	19.00	15.00	19.50	16.50	18.00	27 00	n.a.	20.50	18.75	17.37	17.50
Korea	8.00	8.00	8.00	8.00	7.50	7.50	7.50	8.00	8.00	8.00	n.a.
Malaysia	10.30	8.20	6.00	2.70	2.80	2.75	2.75	2.76	2.66	2.96	3.44
Philippines	33.21	14.61	8.31	10.05	9.73	10.19	9.98	10.31	11.15	11.81	n.a.
Singapore	7.00	5.88	3.94	3.73	4.44	4.31	4.13	n.a.	n.a.	n.a.	n.a.
Taiwan	7.85	4.10	3.87	3.57	3.48	4.36	4.72	n.a.	n.a.	n.a.	n.a.

Commercial bank deposit rates

at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	8.35	7.75	6.30	6.80	7.05	6.90	6.77	6.95	8.05	7.40	5.41
Canada	10.05	9.40	8.15	8.25	8.45	8.50	9.25	9 20	9.60	8.55	8.75
Austria	7.50	6.50	5.50	4.37	4.15	4.15	4 25	4.30	4.60	4.75	4.45
Belgium	10.63	9.63	7.44	7.19	7.00	6.56	6.19	6.52	6 56	n.a.	n.a.
Denmark	6.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	n.a.	n.a.
Finland	5.25	4.75	2.75	2.75	2.75	2.75	2 75	2.75	2 75	2.75	2.75
France	7.04	6.12	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
Germany	5.25	4.40	4.80	3.95	3.85	3.75	3.75	3 75	3 90	3.90	3.70
Ireland	14.63	11.87	13.75	10.75	11.00	10.25	9.62	9.87	9 00	8.62	9.12
Italy	11.64	13.21	10.69	9 75	10.53	n a.	n.a.	n a.	n.a	n.a.	n.a.
Netherlands	5.69	5.81	6.06	5.25	5.12	5.12	5.25	5 25	5 50	5.12	4.81
Norway	12.75	12.00	n.a.	n.a.	n.a.	n.a.	n a.	n.a.	n.a.	n.a.	n.a.
Portugal	28.00	20.00	15.00	14.50	14.50	14.50	14.50	14 50	14.50	14.00	14.00
Spain	11.64	9.64	8.67	8.60	8.77	8.98	9.04	9.21	9 22	9.79	n.a.
Sweden	11.45	12.18	9.93	9.75	10.00	9.00	9 25	9.70	9.70	9.70	9.70
Switzerland	4.50	4.50	4 25	3.50	3.62	3.56	3 69	3.50	4 00	3.81	3.81
United ...ngdom	9.88	11.75	11.19	9.25	8.81	9.25	9 31	10.12	10.00	9.12	8.81
Australia	12.75	18.80	15.56	15.21	14.42	13.85	13.41	12 67	12.14	n.a.	n.a.
Japan	6.38	7.04	4 55	4.11	3.88	3.99	4 09	4.10	4.45	4.63	4.46
New Zealand	15.25	19.98	23.50	23.85	20.00	18.40	18 35	18 40	18.75	11.45	n.a.
South Africa	22.88	13.20	8.65	9.15	9.25	9.00	9 00	9.00	9.35	9.35	9.35
*Argentina**	31.23	5.40	8.41	7.17	7.81	7.96	10.24	12 20	18.20	9.10	8.92
*Brazil***	27.00	18.00	220 00	24.00	n.a.	n.a.	n.a.	11.00	11.00	14.00	15.00
Chile	20.68	23.60	20.98	25 93	18.00	17.00	17 74	25.05	26 83	30.30	31.53
Hong Kong	8.25	6.50	4.62	5.50	6.25	6.87	6.19	6 56	6.37	6.19	4.06
Korea	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	8.00	n.a.
Malaysia	9.58	7.00	6.33	2.43	2.35	2.42	2.59	2.59	2.50	2.56	2.68
Mexico	47.45	72.90	94.30	94.30	94.30	94.30	94 30	94.20	94.20	94.20	94.20
Philippines	31.01	12.34	7.75	7.96	9.71	7.92	7.35	7.35	8.79	8.56	9.50
Singapore	6.13	5.26	3.63	3.63	4.88	4 38	4.25	n.a.	n a	n.a.	n.a.
Taiwan	6.50	5.25	4.00	4.00	4.00	4.00	4 00	4.00	4.00	4.00	4.00
Venezuela	12.50	8.00	8.00	8.91	8.95	8.93	8.97	8.95	8.94	8.93	8.93

*Percent per month.

Domestic government bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	11.61	9.49	7.79	8.45	8.65	8.50	8 88	9.18	9 80	9.04	9.10
Canada	11.66	10.04	9.23	9.82	9.92	9.78	10.23	10.44	11.16	10.21	10.50
Austria	8.03	7.61	7.33	6.86	6.74	6.61	6.68	6.83	7.00	7.26	7.13
Belgium	11.56	9.60	7.70	7.66	7.76	7.82	7.64	7 93	8 25	8.32	n.a.
Denmark	14.60	9.67	11.04	13 09	13.03	10.09	11.57	13.02	12.33	12.56	11.84
Finland	10.73	10.58	7.80	7.77	7.88	7.85	7 86	7 87	7 83	7.77	7.64
France	12.70	11.33	9.89	9.51	9.86	10.40	10 39	10.60	n a.	10.95	n.a.
Germany	7.17	6.57	6.25	5.98	5.99	6.31	6.39	6 59	6.86	6.62	6.46
Ireland	14.90	11.84	12 97	10 47	10.92	10.93	11 81	11.92	11.30	11.05	10.23
Italy	14.52	13.66	10 05	10.08	10.20	10.41	10 90	11 30	n.a.	11.41	n.a.
Netherlands	7.72	6.96	6 40	6.12	6.07	6.26	6 43	6.66	6.81	7.05	6.37
Norway	12.00	13 00	13 24	12.96	13.08	13.11	13 00	13.00	n.a.	n.a.	n.a.
Portugal	22.23	16.64	14.94	n.a.	n.a.	n.a.	n a.	n a.	n.a.	n.a.	n.a.
Spain	13.93	12 52	10.36	12 04	13.43	13.29	13.56	13.75	14.26	14.24	13.34
Sweden	12.04	12.11	10.66	11.07	11.77	11.37	11 79	11 92	n.a.	11.42	11.51
Switzerland	4.60	4.42	4 05	4.03	4.07	4.02	3 98	4 06	4.32	3.31	3.98
United Kingdom	10.25	10.35	10.17	8.87	8.79	9.15	9 69	9.93	9.85	9.22	9.23
Australia	13.50	14.85	13.40	13.05	13.00	12.80	12.95	12.95	12.50	13.65	13.30
Japan	6.47	5 92	4.61	3.42	3.38	3.91	4 44	4.43	5 72	4.58	5.00
New Zealand	16.90	17.00	16.00	15.95	15.65	15.45	15.80	15.65	15.45	15.70	n.a.
South Africa	16.55	18.09	15.06	15.30	15.70	15.60	15.18	14.98	15.12	15.44	15.30
Philippines	18.54	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.
Venezuela	14.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	n.a.	n.a.	n.a.

Commercial bank lending rates to prime borrowers

at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	10.75	9.50	7.50	7.75	8.25	8.25	8.25	8.25	8.75	9.00	8.75
Canada	11.25	10.00	9.75	9.25	9.50	9.50	9.50	10.00	10.00	9.75	9.75
Austria	9.25	9.00	9.00	8.75	8.75	8.50	8.50	8.50	8.50	8.50	8.50
Belgium	14.00	11.50	9.75	9.75	9.25	9.25	8.75	8.75	8.75	8.75	8.75
Denmark	10.50	8.50	8.00	10.00	10.00	9.50	9.50	9.50	9.50	9.50	9.50
Finland	10.68	10.37	8.81	8.86	8.89	8.91	8.93	8.94	n.a.	8.97	n.a.
France	12.00	10.60	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45	9.45
Germany	7.75	7.25	6.75	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.25
Ireland	15.75	12.50	15.75	15.25	14.25	13.75	12.75	12.75	12.00	12.00	12.00
Italy	18.00	15.88	13.00	12.50	12.50	12.50	12.50	13.00	13.00	13.00	13.00
Netherlands	6.25	6.25	7.12	5.75	5.62	5.62	5.62	5.62	5.62	5.50	5.25
Norway	13.00	12.40	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Portugal	29.00	22.50	17.50	19.50	19.50	19.50	19.50	19.50	19.50	18.50	18.50
Spain	15.84	14.75	14.22	15.23	16.21	16.51	16.62	16.61	16.69	16.48	16.38
Sweden	14.50	15.05	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50	11.50
Switzerland	6.00	6.00	5.75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
United Kingdom	9.50	11.50	11.00	9.50	9.00	9.00	9.00	10.00	10.00	9.50	9.00
Australia	14.00	21.00	18.50	17.50	16.75	16.25	15.75	15.25	14.45	14.00	13.75
Japan	5.50	5.50	3.75	3.37	3.37	3.37	3.37	3.37	3.37	3.37	3.37
New Zealand	14.00	21.00	18.50	29.00	22.50	22.00	21.00	19.00	20.00	n.a.	n.a.
South Africa	24.00	16.50	12.00	12.50	12.50	12.50	12.50	12.50	12.50	12.50	12.50
Argentina*	32.05	7.30	11.30	9.20	8.50	9.65	13.20	15.90	20.00	9.80	9.98
Brazil**	31.00	19.00	250.00	37.00	n.a.	n.a.	n.a.	15.00	15.00	18.00	18.00
Chile	60.82	33.34	29.13	36.07	40.27	30.91	27.11	31.66	33.12	37.33	40.20
Hong Kong	11.00	7.00	6.50	6.50	6.50	7.50	7.50	7.50	7.50	6.50	6.00
Indonesia	23.50	18.75	19.75	19.25	19.75	26.00	26.00	23.00	22.00	21.00	20.50
Korea	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	n.a.
Malaysia	12.00	10.50	10.00	8.50	8.50	7.75	7.68	7.68	7.47	7.47	7.47
Mexico	47.54	65.66	95.33	95.79	94.79	93.76	92.91	n.a.	n.a.	n.a.	n.a.
Philippines	44.00	15.00	10.50	8.55	9.31	9.50	9.50	9.50	9.87	10.65	11.50
Singapore	9.40	7.20	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	n.a.
Taiwan	10.00	9.50	9.00	9.00	9.00	9.00	9.00	9.00	9.00	n.a.	n.a.
Venezuela	16.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00

*Percent per month.

**Spread above monetary correction until Feb 86; nominal rate of interest until Jan 87; spread above LBC rate thereafter.

Domestic corporate bond yields

long-term issues, at or near end of month

	1984	1985	1986	1987							
	Dec	Dec	Dec	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
United States	12.25	10.15	8.88	9.60	9.55	9.55	9.90	10.15	10.75	10.25	10.30
Canada	12.42	10.74	10.18	10.44	10.44	10.46	11.05	11.74	11.81	11.22	11.32
France	12.94	11.76	10.18	9.82	10.05	10.38	10.37	10.77	11.07	11.28	n.a.
Germany	7.20	6.90	6.50	6.50	6.40	6.50	6.60	6.70	n.a.	n.a.	n.a.
Netherlands	7.51	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.t.	n.a.	n.a.
Norway	12.75	14.00	14.94	15.47	14.22	16.21	n.a.	n.a.	n.a.	n.a.	n.a.
Spain	18.32	14.92	13.40	15.52	15.76	16.39	16.94	17.52	17.39	17.93	17.08
Sweden	12.33	13.25	11.99	12.15	12.89	12.47	12.68	12.89	n.a.	12.78	12.36
Switzerland	5.09	4.93	4.72	4.57	4.56	4.56	4.53	4.55	4.72	4.87	4.65
United Kingdom	11.64	11.47	11.71	10.09	10.19	10.15	10.55	11.41	11.43	n.a.	10.59
Japan	7.10	6.79	5.93	4.99	4.71	5.20	5.10	6.00	6.89	6.27	n.a.
Korea	15.00	13.60	12.80	13.00	12.80	12.70	12.70	12.60	12.80	12.80	n.a.
Venezuela	18.00	17.00	17.00	17.00	17.00	17.00	17.00	n.a.	n.a.	n.a.	n.a.

World Financial Markets

Published by
Morgan Guaranty Trust Company of New York
International Economics Department
23 Wall Street, New York, NY 10015

Member, Federal Deposit Insurance Corporation. Printed in U.S.A.

Jan. & Feb. 1988 Not Published